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(71)Applicant : TOSHIBA CORP

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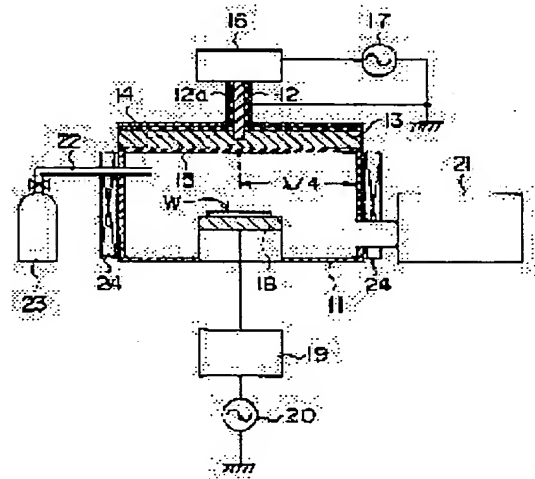
(72)Inventor : KURIHARA KAZUAKI  
SEKINE MAKOTO  
TOMIOKA KAZUHIRO

## (54) PLASMA PROCESSING DEVICE AND PROCESSING METHOD FOR PLASMA

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a plasma device and a processing method for a plasma, capable of generating high-density, and a uniform plasma by means of a simple device configuration.

SOLUTION: At least part of a vacuum tank 11 is used as an antenna 13 for introducing an electromagnetic wave in the vacuum tank 11 to generate plasma. The diameter of the antenna 13 is set to near  $n\lambda/2$  ( $n$  is a positive integer) so that the plasma generated by the electromagnetic wave may be approximately uniform at a given region where the wavelength of the electromagnetic wave is  $\lambda$ , in addition a temperature control mechanism for retaining the antenna to a given temperature is provided.



## LEGAL STATUS

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